

CLAIMS

What is claimed is:

1. A system for testing devices, said system comprising:
  - 5 a first device for test;
  - a second device for test coupled to said first device in a scan chain; and
  - a signal selector coupled between said first and second devices, said signal selector for selecting between an output signal that is output from said first device and a bypass signal that has bypassed said first device.
- 10 2. The system of Claim 1 wherein said signal selector is coupled to a first power rail that is also coupled to said first device.
- 15 3. The system of Claim 2 wherein said signal selector selects said bypass signal when said first power rail is low and said output signal when said first power rail is high.
4. The system of Claim 2 wherein said signal selector is also coupled to a standby power rail that powers said signal selector.
- 20 5. The system of Claim 1 wherein said signal selector selects between said output signal and said bypass signal in response to a control signal.
- 25 6. The system of Claim 1 wherein said second device is coupled to a second power rail.
7. The system of Claim 1 wherein said signal selector is a multiplexer.
- 30 8. The system of Claim 1 wherein said first and second devices are boundary scan compliant devices.
9. A method of testing devices in a scan chain, said method comprising:
  - 35 selecting a bypass signal that has bypassed a first device;
  - selecting an output signal instead of said bypass signal, said output signal being output from said first device; and
  - forwarding a selected signal to a second device in said scan chain.

10. The method of Claim 9 wherein said selecting between said bypass signal and said output signal is performed by a signal selector that is coupled to a first power rail that is also coupled to said first device.

5

11. The method of Claim 10 wherein said signal selector selects said bypass signal when said first power rail is low and said output signal when said first power rail is high.

10

12. The method of Claim 10 wherein said signal selector is also coupled to a standby power rail.

15

13. The method of Claim 9 wherein said selecting between said bypass signal and said output signal is performed by a signal selector in response to a control signal received by said signal selector.

14. The method of Claim 9 wherein said first and second devices are boundary scan compliant devices.

20

15. A system for testing devices, said system comprising:  
a first device for test coupled in a scan chain;  
an input line coupled to said first device;  
an output line coupled to said first device;  
a bypass line coupled to said input line upstream of said first device;

25 and

a signal selector coupled to said output line and to said bypass line, wherein said signal selector selects from an output signal on said output line and an input signal delivered to said signal selector via said bypass line.

30

16. The system of Claim 15 wherein said signal selector is coupled to a first power rail that is also coupled to said first device.

35

17. The system of Claim 16 wherein said signal selector selects said input signal when said first power rail is low and said output signal when said first power rail is high.

18. The system of Claim 16 wherein said signal selector is also coupled to a standby power rail that powers said signal selector.

19. The system of Claim 15 wherein said signal selector is coupled to a control line that provides a control signal, wherein said signal selector selects between said output signal and said input signal in response to said control signal.

5

20. The system of Claim 15 further comprising:  
a second device for test coupled to said signal selector.

10 21. The system of Claim 20 wherein said first device is coupled to one power rail and wherein said second device is coupled to a different power rail.

22. The system of Claim 15 wherein said signal selector is a multiplexer.

15

23. The system of Claim 15 wherein said first device is boundary scan compliant.